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FROM REAL TO DIGITAL–MEDIATED OBJECTS: SOME REFLECTIONS UPON THE DIGITAL REPRODUCTION OF ARCHAEOLOGICAL OBJECTS

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Abstract

The digital duplication proposed by computer–mediated technologies (CMT) cultivates a new aesthetics of reproduction as it serves the need for persistence of the object, thus, ensuring its ephemeral presence. The digital object, in turn, appears not to be present to us immediately, but through its digital model. Nevertheless, the question to pose is whether the reality of the object, not in its immediacy, but in the perspective of its perpetuation in time ultimately leads to its replacement by an artificial integrity that challenges the risks of actual existence. A possible answer could be that the denaturalization of the object present to our consciousness denies its right to exist in the corruptible historical time in order to conquer digital oblivion.

Keywords: Life–world, Virtual object, Archaeological object, Thing, Natural contract

Introduction

Through digital–mediated technologies we assert a process that could be designated as planned operation of duplication which could lead to the rupture of the object's uniqueness. The receiver of the digital object is involved, more or less consciously, in a disembodied reality, in 'cyberphysically digital life–forms as reconfigured through computer software systems' (cited in Tomas, 1991: 33). Furthermore, the transfer of a real object into digital space introduces a new spatial distribution, but also an incision in the order of linear time. The duplication of the real object by its digital double implicates the contraction of linear time, the constriction of its lived presence, and last, but not least, the denial of its uniqueness. What is thus achieved is the restoration of the 'visually correct', which is most often

related to the restoration of a deficiency in order for the object to recover its integrity. What is also involved in these processes is the replacement of the object's sensible perception by a software in order for the object to gain an expanded geography, in other words, its duplication through digital media, which bears all the signs of an absence. The issue we will also address as to the status of the virtual, disembodied object is whether it is the real or the virtual object that is closer to the condition of human vulnerability and risk. In our paper we will focus on the relationship between real and digital–mediated objects on the basis of the intertwining of presence and embodiment as existential condition of the cultural self, on one hand, and disembodiment as a unique characteristic of virtual presence, on the other. It is in this light that an archaeological object is not a disembodied object, but an integral 'thing' that encompasses a tangible immediacy, thus constituting the dynamic component of a cultural totality. Consequently, our aim will be to study the archeological object as a 'being–in–the–world', necessitating a condition of embodiment which differentiates it from its digital duplication.

The archaeological object and the life–world

In today's globalized environment a transformation has occurred: 'the real has been confused with the directly accessible' (cited in Serres, 2001: 213). The object's disengagement from its unique place in the world has made possible its endless reconstruction, as it now belongs to endless places which are not real but virtual. Thus, it becomes integrated into a global space, finding itself away from its birthplace (Ess, 2005: 161–164). Being detached from the state of actual presence virtual object is subject to an infinite 'diaspora', as it no longer possesses the identifiable features or the elaborative interrelations with an artistic center, a workshop or a commercial route which make it 'what it is'.

Current technological innovation has introduced the substitution of reality, as real objects are taken over by virtual objects, that is, objects reduced to mono–sensory perceptions and detached from their life–world [Our use of the term life–world (*Lebenswelt*) is directly inspired by the phenomenological analyses of Edmund Husserl (Held, 2003: 32–62; Russell, 2007: 194–197)] . However, digital technologies that create virtual objects focus on making these both attainable and attractive to a large number of people. They aim primarily to convince us that they can operate on a global scale by achieving an artificial universalisation. The success of virtual reality technologies lies in what Slavoj Žižek (2003: 96) identifies as the emergence of a simulated reality, from which the essence of things is absent (Bryant, 2011: 123–134). Let us take for instance the world we live in, our relationship with the past and archaeological objects, but also our daily existence: we have built a technologically mediated reality through which we

can finally experience a 'real' reality. But it is precisely this simulated reality that we recognize as reality instead of reality itself.

Virtual reality shows great interest in beautifying the object: it mimics its form but is unable to reproduce the object's life–world or 'human world–life' (Husserl, 1970: § 43, 155–157; Moran, 2012: 178–217). The illusionary appeal of a supposed copy of a 'real' archaeological object may sound stimulating but technologically mediated simulations can never replace or even reproduce the elaborative cultural ties that make the object's uniqueness as such. The archaeological object, in its natural habitat, is tied to its very own life–world. In addition, its distinct local and general differences are rooted in its origin. The object is intertwined with its life–world and it is through its life–worldly existence that it is constantly updated in the human conscience through time.

Whatever is reproduced in the realm of the virtual disrupts actual presence (Baudrillard, 1983: 128–129) since virtual reality aspires to reverse the natural process of decay and oblivion by establishing a special kind of cumulative memory through a constant flow of information. Virtual reality technologies undertake the task of replacing oral memory, whereas in the course of human evolution a series of mediums (i.e. clay, stone, leather, papyrus, paper) held the burden of accumulating the experiences of the past. They attempt to liberate us from the overcharge of the objectified memory, which real objects bear with them. Nevertheless, the ability to recall a memory is the result of a complex process that enabled mankind to identify archaeological objects as organic parts of a collective memory. This collectively constituted memory allows human mind to question and create.

More importantly, the real object is the result of an elaborate experience within a wider life–world. Matter and form go beyond their tangible nature, as they establish symbolically a whole new institution inside the life–world (Baudrillard, 1968: 129–131). Its archaeological object is unique, as it is shaped through a process of cultural embodiment. Additionally, the object itself is directly linked to a variety of features, such as its ingredients, materials or compositions, its form and shape, color, design, weight, size as well as its state of preservation. It outlines the boundaries and exclusion zones that define the regions within the life–world. The physical qualities that make up an object's appearance, once historically defined, are embedded into a context that allows us to distinguish one object from another, thus making it a reference object. Consequently, the archaeological object does not operate independently from the life–world it belongs to. It serves a proof that allows us to simultaneously distinguish and condense evidence. The object stems from a differentiation process which reminds us of the multitude of diverse embodied relations which have made

it up (Bourdieu, 1990; Geertz, 1993). For this reason the archaeological object is unique in its state of presence.

When shaped as a cultural construct, the real object essentially enters the life–world through the subject's multi–sensory experience. In contrast, because of its reduced presence, the virtual archaeological object leads to the deprivation of the situated and embodied experience. When the archaeological object is disjointed from its life–world, it no longer has any limits. However, limits have an important function. They actually help us to determine the object's identity in addition to its virtual replication, even if illusory, dematerialized or disembodied. The real object, therefore, participates in a transferable embodiment process, which can be designated in terms of 'embodied situated knowledge' (Ihde, 2002: 69–75). Could the virtual archaeological object succeed in replacing the real object with the same terms and conditions as the real object? When virtual replication takes hold, it contributes to the object's restructuring, as all possible meanings which emerge from its unique creation and its multiple uses are lost. As a result the object is transformed into a mere representation. Thus, it can no longer produce or recreate meanings, since the object's virtual replication stems from an impaired life–world turned into digital imaging or into what Don Ihde describes the 'imaginative invention of the absent programmer' (cited in Ihde, 2002: 81).

Archaeological object's embodied presence

A virtually replicated archaeological object has necessarily undergone a process of simplification and dematerialization. At the same time, a virtually created object seems to support the ideal of immunity, whereas the real archaeological object is always subject to decay. Nevertheless, the principal condition of an archaeological object's embodied situated presence is not immunity or versatility but uniqueness and finitude. One could argue that the real archaeological object exists as a unique entity, whereas its virtual replication holds the potential for a multitude of options (Ihde, 2002: 85). But in any case, virtual replication cannot under any circumstances reproduce tangible interactions among the object and its environing world (Ihde, 2002: 87). Therefore, an object's virtual representation allows for a reduced perception which is meant to replace the multi–sensory perception of the real object. To compensate for the loss of the real presence, the virtual object usually operates under conditions of enhanced visibility or audibility. However, for the virtual boundary of the non–perishable to be replaced by an enhanced visibility or audibility, it requires 'a correction and a discipline upon the senses' (cited in Shapin and Schaffer, 2011: 36–37). In reality, the shift toward a virtual environment is meant to substitute for any activity of recall and repetition.

Only the conditions that ensure our embeddedness into a life–world can give meaning to our experience of the past. Our existence is culturally mediated, whereas cultural contexts are determined symbolic signifiers which provide the self with a framework, thus defining its cultural constitution. So, within 'real' space and time a boundary determines the difference between the same and the other, the real and the imagined, the local and the global. Moreover, a privileged feature in an object's conception and use is the active involvement of the human subject. In fact, an object belongs to the field of everyday human experience. Consequently, when the object is disconnected from everyday human experience, it is also disengaged from all subjective experience.

Entry into virtual reality applies to imaginary objects as opposed to real ones and so the perceptual field of objects is modified. This transformation process ruptures the boundaries of the tangible self, but also affects the way in which the self situates himself in the world. In contrast to the embodied perception of the real object, in the new virtual environment, meaning is conferred to the self based on multiple technological capabilities. This is even more important because the relationship between the self and technology has always been twofold: 'Insofar as I use or employ a technology, I am used by and employed by that technology as well' (cited in Ihde, 2002: 137). In reality, the virtual object has radically modified the human subject's sense of finitude and risk. On the one hand, a real object possesses integrity, which is no other than the life–world it belongs to. But also, the subject who created or used the object belongs to the same life–world. Thus, upon closer look, the real object's presence reveals the intentions of its maker, as well as the life–world within which the object's creation was accomplished. On the other hand, the virtual object lacks the experiential density proper to real objects. Virtual reality seeks to exceed the limits of the finite, natural and cultural, self thanks to its idealizing position. It seems to enable us to overcome the ravages of time and erase any imperfections. Such is the case of the idealized virtual body that acts as a compensatory mechanism for whatever imperfections may exist. However, virtual reality's claim to substitute for the real object operates simultaneously in the opposite direction, one that leads toward the loss of the archaeological object's unity and integrity. Virtual reality detracts the object from complying with the terms of its cultural presence under two conditions. The first condition has to do with the creator's integration in his object, whereas the second one has to do with the time invested in creating the object granted that the creation harnesses the very nature of the object. The archaeological object's uniqueness is directly linked to its creator's long–term relationship with learning processes and skills which are part of its life–world. Moreover,

the object substitutes for past relationships, because it happens to belong to a community (Ess, 2005: 175–176).

In reality, disconnecting from the real world through virtual reality technologies implies opening the door to a state that is foreign to the embodied self and its practices. Prior to virtual replication, if we were to list the values that are integrated in a real object we'll notice that its relationship to nature is not the only thing at stake. The object becomes the thing that is transformed into a material for a whole community (Ihde, 2002: 37–40). This material touches on all aspects of the life–world including the constraints and challenges that the material itself imposed on its creator through its processing and use. The real object is a documented expression of allegiance to a pre–formulated order, for which embodiment is the most crucial factor. The virtual disembodied object certainly produces the denial of nature, thus, allowing a special kind of freedom and autonomy, as the object is determined independently from the limitations – ethnic, gendered and other – of the embodied self.

Freedom and autonomy are inevitably linked to a challenge posed to actual presence and its coercions. The real object would be used, modified or destroyed, whereas in virtual reality the object exists independently of its creator's and users' intentionality. The real object carries with it all the inherited knowledge gained from its creator's and users' lived experiences, whereas the virtual disembodied object tends to surpass the weaknesses of the past that continue to exist in the real object as accumulated traces of memory. The most significant consequence of virtual disembodiment is demonstrated in the case where the material (i.e. object) must be withdrawn from the virtual space, regardless if shaped by a cultural practice. The object is no longer simply a finalized product produced at a particular time and place. It becomes a one–dimensional reduced image or, in the best of cases, a three–dimensional digital reproduction, whereas, the real object is the product of a complex creative process. Contrary to this, the virtual object can only be identified to a partial representation. Due to its inability to exist in a state of actual presence and among living bodies, virtual reality is unable to reconstruct the whole of the ontological, cognitive and moral–practical dimensions that make up our experience of the life–world. It holds true, however, that virtual reality provides various forms of non–physical contact, which eliminate all the contexts of physical geography, introducing a spatial–temporal discontinuity. To remove the object's connection with its life–world has heavy consequences, but this is the way the human subject has always escaped to the imaginary. Additionally, when an archaeological objects is embedded in a life–world, a state of reciprocity is initiated, manifested in lived experiences, whereas in the case of virtual object no such circumstances exist.

The 'Openness' of the archaeological object to the world and its reality as a thing

Prior to becoming a virtual object, thus, being detached from its life–world, the archaeological object witnesses the effort of combining contents and meanings which confirm it's identity with itself and the world it belongs to. In fact, the openness of the archaeological object to its life–world is far more important than its use for practical purposes or knowledge acquisition, as it is the outcome of man's mediation with nature at a specific point in time. Its 'openness' to the world (Heidegger, 2002: 5, 14, 30, 35–37; Feenberg, 2006: 193–199) implies not only its creator's intentionality, but a self–discovery full of meaning symbolically shaped. In contrast, the virtualization of the archaeological object deprives it of its 'openness" to the world. The virtual object becomes 'unworlded' (*entweltlicht*). This process is accompanied by several shortcomings, the most serious being the inability for the virtual to recreate the culturally coherent complex of lived experiences and symbolic structures that allow a past life–world to be genuinely reactivated.

According to Michel Serres the object's virtual substitution by a one–dimensional or even three–dimensional object can certainly succeed in replicating several of its fundamental characteristics (Serres, 2001: 186–188, 258–259, 272–273). However, the archaeological object's prior associations with a life–world are deleted, because these have been acquired through specific practices and symbolic relations. The virtual object is produced outside any specific practice or symbolic interaction, even if it is generated by a three–dimensional or even multi–dimensional digital process (Csordas, 1999: 145–151). It does not participate in any amount to the state of uncertainty and risk which emerges along with lived experiences within an actual life–world. Furthermore, it does not recall the collective experiences of perishability and finitude, as it is impossible to reconstruct the complex internal structure and consistency of the life–world in which it emerged.

The virtual object is a power tool because of its ability to substitute the perishable with the non–perishable, to prolong life, to preserve memory, last but not least to dismiss human mortality. Contrary to the actual reality, which is often burdened with postponements and delays, the benefit of replication is that it removes the uncertainty of perishability and decay. Instead of this, what is established is the illusion of exceeding the spatio–temporal limits. Within virtual reality we don't currently exist as virtual beings, but through a digital medium that constantly removes all burden associated to embodied presence. But this comes along with the loss of the wealth of symbolizations of the past (Bourdieu, 1990). Where the wealth of symbolic interactions once existed, a new but permanent form of accumulation through information acquisition is now prevails. This

cumulative build up certainly aspires to preserve a certain situation. Following our entrance into the course of history we've built the need to preserve surpluses. These surpluses are ultimately the only means for controlling the survival and reproduction of structures of dominance and subordination. In fact, the virtual object offers the possibility of maximizing of results and accumulation of information. It may, however, correspond to a fake situation based on the mastery of an artifice. What lies behind it is the drive to dominate the past, so characteristic of the modern times. The unfamiliarity of the 'non–places' (Augé, 1995) that the virtual object has introduced, while it depreciates real time and space, it brings to light a new reality. As opposed to the perishable real object, virtual reality technologies allow the representational reconstruction of an object that is favorable to any design and redesign. The only way–out to the 'heroic virtual' is to preserve the embodied human existence and its historical rootedness as well as the life–world that sustains both.

The sheer enforcement to preserve objects of the past in an inventory and turn them into representational objects was in fact conceived as a counterweight to human mortality. By reducing actual objects to representational objects, modernity has brought to an end its project to objectify nature. Consequently, in contrast the 'reality' of a thing, in our case of an archaeological object, should be understood as a whole of life–worldly relations and interactions. Such interactions create a context that aims to ensure the reproduction of a symbolically instituted life–world. The real object is full embodied and perceived through multi–sensory experiences. It also involves a set of cultural constants, which are irreducible to mere representation, even of the most sophisticated kind. In contrast, the virtual object possesses no life–world, as its decisive feature is no other than the loss of actual presence. Therefore, our experience of the past can not be reduced to processes of virtualization of the archaeological objects, which deprive the latter of their embeddedness into past life–worlds.

The zealots of virtual reality argue that simulated reality is not deprived of qualities such as reciprocity and interaction (Forte, 2008: 91–106; Forte, 2010; Gillings, 2005). However, these latter presuppose the existence of a life–world, as they can never be disembedded or decontextualized in some way. Simulated environments, even in its more sophisticated forms, cannot be interactive in a specific reductive way which is compatible with their artificiality. In other worlds, simulation reinforces the archaeological object's artificial reproductions and does not in any way compensate for the loss of its life–world, as the virtual is not a duplicated or improved version of the real, but what is utterly different from it (Miller and Richards, 1995). In fact, a virtual archaeological objet is more of a 'non–object' than an enhanced object, and this is something that technological

advancements, such as cyberspace (Bukatman, 2000: 100–101) archaeology, which claim to enrich simulation processes, inevitably fails to see.

We find ourselves at a point in human history where research on the human being's appearance on Earth is gradually replaced with research on the Earth's appearance in human history. For this reason the current polluted environment, which often predicts ecological destruction, must adopt a new contract – a natural contract –, which according to Michel Serres should replace the modern social contract (Serres, 2001: 183–185; Jeleniewski Seidler, 1998: 23–25). Its aim would be to remove the surplus from the virtual's inflicted power so that we don't return to a denial state where nature's natural resources are depleted (reversed surplus).

Rapid technological development has lead to the creation of a global community. This new reality possesses all the characteristics of a global environment (see, for instance, the evolution of media communication), and, because of its intense development, it has established a homogeneous space. In this light, topography is no longer relevant (Serres, 2001: 259–260). In reality, the virtual has the comparative advantage of replacing the real object with an encoded software (Nayar, 2004: 228–229). It is this change of great magnitude which has led to the substitution of the local by the 'glocal'. The real object exists in constant fear of losing its integrity or of suffering from irreparable damage, but this threatening battle against the possibility for irrevocable damage and destruction is removed from the virtual field. Everything that is created under the threat of being endangered in the first case, is granted ever–lasting presence in the second (Heim, 1993: 134–137). Therefore, the real–virtual bipolarity represents the bipolarity of the actually present, thus susceptibility to decay, on the one hand, and the everlasting presence that comes with simulation, on the other. Nevertheless, the virtual object is unable to have any relationship to the life–world.

Computer–mediated technologies (CMT) can be designated as intrusive, not embracing technological patterns, as they tend to intrude into past life–worlds, thus imposing themselves upon them. If the issue is to comprehend the past this is certainly not the best or the most valid way of doing so, because to some extend we transfer today's needs, wants, aspirations, but also today's technological capacities, into something totally other. Even in their most complex responsive or interactive versions computer–mediated technologies fail to turn past life–worlds into meaningful entities.

Conclusion

Firstly, virtual embodiment is a contested idea. Embodiment has to do with a specific life–world. I doubt that even a fully immersive environment can be identified to life–world, or at least this is something to

be proved. Secondly, the cognitive background and the state of validity in interpretation through simulation processes should be questioned as such. In my opinion virtual or cyber archaeology take for granted what archaeologists, epistemologically speaking, should prove. Of course, this is an interdisciplinary matter. Nevertheless, those are questions which should be taken seriously when our objective is the comprehension of the past.

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